

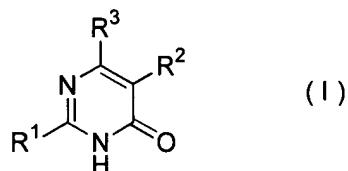
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-26: (Canceled)

Claim 27: (Currently Amended) A pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof:



wherein

R¹ represents a group represented by -N(R⁴)-W-R⁵ wherein

R⁴ represents a hydrogen atom;

R⁵ represents a C₁-C₁₈ alkyl group which may be substituted, a C₃-C₁₈ alkenyl group which may be substituted, a C₃-C₁₈ alkynyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, or a C₆-C₁₄ aryl group which may be substituted, and

symbol “W” represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom ~~which may be~~ substituted with a C₁-C₁₈ alkyl group which may be substituted;

R² represents a hydrogen atom or ~~, hydroxyl group, an unsubstituted, linear C₁-C₈ alkyl group, a C₃-C₈ alkenyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, a C₁-C₈ alkyloxy group which may be substituted, a C₃-C₈ cycloalkyloxy group which may be substituted, a C₆-C₁₄ aryloxy group which may be substituted, a C₁-C₈ alkylthio group which may be substituted, a halogen atom, nitro group, cyano group, an amino group which may be substituted, carboxyl group, a C₁-C₈ alkyloxycarbonyl group which may be substituted, a C₃-C₈ cycloalkyloxycarbonyl group which may be substituted, carbamoyl group, a C₁-C₈ alkylaminocarbonyl group which may be substituted, or a C₁-C₈ dialkylaminocarbonyl group which may be substituted;~~; and

R³ represents a 4-pyridyl group which may be substituted.

Claim 28: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 27 wherein R⁵ represents a C₁-C₁₈ alkyl group substituted with a C₆-C₁₀ aryl.

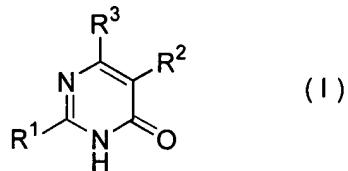
Claim 29 (Canceled)

Claim 30: (Currently Amended) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 29 27 wherein R² represents a hydrogen atom.

Claim 31: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 27 wherein the symbol "W" represents a single bond or a carbonyl group.

Claim 32: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 31 wherein the symbol “W” represents a single bond.

Claim 33: (Currently Amended) A pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof:



wherein R¹ represents a group represented by -N(R⁴)-W-R⁵ wherein

R⁴ represents a hydrogen atom, a C₁-C₁₈ alkyl group which may be substituted, a C₃-C₁₈ alkenyl group which may be substituted, a C₃-C₁₈ alkynyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, or a C₆-C₁₄ aryl group which may be substituted,
R⁵ represents an alkyl group which may be substituted, said alkyl group being one of ethyl group, n-propyl group, isopropyl group, n-butyl group, isobutyl group, sec-butyl group, tert-butyl group, n-pentyl group, isopentyl group, neopentylgroup, 1,1-dimethylpropyl group, n-hexyl group, isohexyl group, a linear or branched heptyl group, octyl group, nonyl group, decyl group, undecyl group, dodecyl group, tridecyl group, tetradecyl group, pentadecyl group or octadecyl group, a C₃-C₁₈ alkenyl group which may be substituted, a C₃-C₁₈ alkynyl group

which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, or a C₆-C₁₄ aryl group which may be substituted, and

symbol "W" represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom ~~which may be~~ substituted with a C₁-C₁₈ alkyl group which may be substituted;

R² represents a hydrogen atom ~~or, hydroxyl group, an unsubstituted, linear C₁-C₈ alkyl group, a C₃-C₈ alkenyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, a C₁-C₈ alkyloxy group which may be substituted, a C₃-C₈ cycloalkyloxy group which may be substituted, a C₆-C₁₄ aryloxy group which may be substituted, a C₁-C₈ alkylthio group which may be substituted, a halogen atom, nitro group, cyano group, an amino group which may be substituted, carboxyl group, a C₁-C₈ alkyloxycarbonyl group which may be substituted, a C₃-C₈ cycloalkyloxycarbonyl group which may be substituted, carbamoyl group, a C₁-C₈ alkylaminocarbonyl group which may be substituted, or a C₁-C₈ dialkylaminocarbonyl group which may be substituted;~~ and

R³ represents a 4-pyridyl group which may be substituted.

Claim 34 (Canceled)

Claim 35: (Currently Amended) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 34 33 wherein R² represents a hydrogen atom.

Claim 36: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 33 wherein the symbol “W” represents a single bond or a carbonyl group.

Claim 37: (Previously Presented) The pyrimidone compound or the pharmaceutically acceptable salt thereof, or the solvate thereof, or the hydrate thereof according to claim 36 wherein the symbol “W” represents a single bond.

Claim 38: (Previously Presented) The pyrimidone compound or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof according to claim 33 wherein R¹ represents N,N-diethylamino group, N,N-dipropylamino group, N-benzyl-N-methylamino group, N-isobutyl-N-methylamino group, N-benzylamino group, N-(3-hydroxypropyl)amino group, N-cyclohexylmethylamino group, N-phenylamino group, N-(4-ethylphenyl)amino group, N-(3-bromophenyl)amino group or N-(3-methoxyphenyl)amino group.

Claim 39: (Previously Presented) A pyrimidone compound which is selected from the group consisting of:

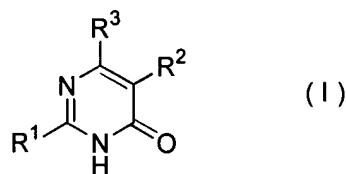
2-(N-phenylamino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N,N-diethylamino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N,N-dipropylamino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N-benzylamino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N-benzyl-N-methylamino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N-(3-bromophenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N-(4-ethylphenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,

2-(N-(3-methoxyphenyl)amino)-6-(4-pyridyl)pyrimidin-4-one,
2-(N-cyclohexylmethylamino)-6-(4-pyridyl)pyrimidin-4-one, and
2-(N-isobutyl-N-methylamino)-6-(4-pyridyl)pyrimidin-4-one,
or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof.

Claim 40: (Previously Presented) A pharmaceutical composition comprising as an active ingredient a substance selected from the group consisting of the pyrimidone compound or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof according to claim 27.

Claim 41: (Previously Presented) A pharmaceutical composition comprising as an active ingredient a substance selected from the group consisting of the pyrimidone compound or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof according to claim 33.

Claim 42: (Currently Amended) A method for therapeutic treatment of Alzheimer disease, which comprises administering to a patient a therapeutically effective amount of a substance selected from the group consisting of a pyrimidone compound represented by formula (I) or a pharmaceutically acceptable salt thereof, or a solvate thereof or a hydrate thereof:



wherein

R^1 represents a group represented by $-N(R^4)-W-R^5$ wherein
 R^4 and R^5 independently represent a hydrogen atom, a C₁-C₁₈ alkyl group which may be substituted, a C₃-C₁₈ alkenyl group which may be substituted, a C₃-C₁₈ alkynyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, or a C₆-C₁₄ aryl group which may be substituted, and
symbol "W" represents a single bond, a carbonyl group, a sulfonyl group, NH or a nitrogen atom which may be substituted with a C₁-C₁₈ alkyl group which may be substituted;

R^2 represents a hydrogen atom or, ~~hydroxyl group, an unsubstituted C₁-C₈ alkyl group, a C₃-C₈ alkenyl group which may be substituted, a C₃-C₈ cycloalkyl group which may be substituted, a C₁-C₈ alkyloxy group which may be substituted, a C₃-C₈ cycloalkyloxy group which may be substituted, a C₆-C₁₄ aryloxy group which may be substituted, a C₁-C₈ alkylthio group which may be substituted, a halogen atom, nitro group, cyano group, an amino group which may be substituted, carboxyl group, a C₁-C₈ alkyloxycarbonyl group which may be substituted, a C₃-C₈ cycloalkyloxycarbonyl group which may be substituted, carbamoyl group, a C₁-C₈ alkylaminocarbonyl group which may be substituted, or a C₁-C₈ dialkylaminocarbonyl group which may be substituted~~; and

R^3 represents a pyridyl group which may be substituted.